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ECONOMIC POLICY AND OUTLOOK IN 1988
for
AGRIBUSINESS

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PURPOSE

A. Apply economic principles to some data and observations in order to help you better understand:

1. The national and international economic situation within which you operate

2. How the business of agriculture is changing

3. The factors that are influencing your markets and marketing opportunities over the next several months, and

4. Some emerging policy issues that may have significant implications for your business in the future

B. Most importantly, our aim is to provide you with some information and insights that will help you make next year more profitable

SLIDE 1: ECONOMIC POLICY AND OUTLOOK FOR 1988

A. Summary --- what we will say!

1. Prospects for the general economy are highly uncertain

   a. The impact of the stock market decline is difficult to assess

   b. Economy continues to be plagued by the "twin deficit" problem

      i. Federal budget deficit

      ii. U.S. trade deficit

2. The farm financial crisis is receding, due in large part to record levels of farm income

   a. The recovery has been based on huge government payments, unusually high livestock prices, and cuts in production trends

   b. The positive trends in these components of farm income are expected not expected to continue over the next 2 to 3 years

c. Current financial adjustments may or may not be sufficient to weather the next downturn without another farm crisis

3. Agricultural policy is on the agenda for the first time at international trade negotiations

   a. The U.S has proposed the elimination of all agricultural subsidies and tariffs

   b. Other countries have expressed reservations about the proposal

   c. The outcome of the negotiations is likely to have an important and long-lasting impact on U.S. agricultural policies

4. Crop agriculture is beginning the process of reducing the surplus stocks accumulated in the first half of the 1980s

   a. Use has increased more rapidly than expected

   b. Without major weather problems, though, the surpluses are likely to continue will into the 1990s

5. Animal agriculture enjoyed its most profitable year in almost a decade

   a. Profits driven by high hog and cattle prices and a sharp decline in feed costs

   b. Increases in the supply of meat are expected to sharply reduce prices and profits in the upcoming year

B. As usual, prospects differ among enterprises, individuals and firms

SLIDE 2: GENERAL ECONOMIC CONDITIONS

QUESTION 1---<u>Despite the crash of the stock market, the rate of growth of gross national product is expected to slow only slightly in 1988</u>.

SLIDE 3: U.S. REAL GROSS NATIONAL PRODUCT

A. The current economic expansion has lasted five years and is the longest peacetime expansion on record

1. Real GNP growth has been impressive, averaging 4% per year over 1983-1987

   a. Strongest growth was in 1984: 6.8%

   b. Slowest growth was in 1984: 2.9%

   c. Economy has rebounded in 1987, with real growth estimated to be 3.6%

2. Employment growth has been especially strong

   a. Nearly 13 million new jobs created

   b. Unemployment rate reduced from 9.5% in 1983 to a current rate of 6.0%

3. Inflation has been held in check

   a. Annual change in the Consumer Price Index averaged 3.3% over 1983-1987

   b. Despite rebound in energy prices, a resurgence in inflation is not expected

   c. 1987 and 1988: +3.5%

4. On the surface, economic signals seem favorable for 1988

   a. Real GNP growth has been accelerating

      i. 86IV: +1.5%

      ii. 87I: +4.4%

      iii. 87II: +2.5%

      iv. 87III: :3.8%

   b. Index of leading economic indicators increased each month from Jan.-Aug. 87

      i. slight decline in Sep 87

B. However, the crash of the stock market in October has brought into question all assumptions about the outlook for 1988

1. The decline is important for two reasons

   a. The stock market is generally a good indicator of future prospects for the economy

      i. Decline in prices may be signalling that recession is imminent

      ii. Stock market is not a perfect predictor

      iii. Price decline in 1974-75 was followed by a four-year economic expansion

   b. Decline in wealth will cause people to consume less

i. Wealth loss as a result of stock price declines was about one trillion dollars

ii. Consumers are estimated to cut spending 2.5 cents for each dollar of wealth lost

iii. As spending falls, businesses will cut back production, employment, and investment

C. Under current circumstances, forecasts of economic growth for 1988 must be viewed with more caution than normal

1. Real GNP is expected to grow only about 2.5% in 1988

a. Primary reason is slowdown in consumer spending

b. Expenditures were slowing sharply before the stock market crash

c. Consumer finances are stretched

i. Installment debt increased 60% over 1983-1987

ii. Savings rate halved over the same period

2. Recession is not expected in 1988, but chances of one in 1989 went up sharply after the stock market crash

a. Chance of a recession in 1989 may now be as high as 4 or 5 out of 10

D. The expected slowdown in economic growth and the stock market decline are linked to the "twin deficit" problem

SLIDE 4: U.S. TRADE AND FEDERAL BUDGET BALANCE

A. The U.S. Federal budget balance has decreased sharply in the 1980s

1. 1979 balance = $ -16.1 billion

2. 1982 balance = $ -145.7 billion

3. 1986 balance = $ -204.7 billion

4. The deficits have provided a strong fiscal stimulus to the economy

a. Government spending (nominal) increased almost 8% per year over 1983-1987

B. The deficits also create an imbalance in the trade sector

1. Domestic savings have not been large enough to finance Federal borrowings

2. Foreign savings must be used to finance the deficit as a result

3. To attract the foreign savings, U.S. interest rates and the value of the dollar must be increased

4. This makes U.S. exports more expensive and imports to the U.S. less expensive

5. The final result is a trade imbalance that must offset the budget deficit

C. Improvement in the trade deficit in 1987 is related to reduction of the budget deficit and the fall in the value of the dollar

1. Budget balance improved almost $60 billion

2. Value of the dollar has fallen about 30% since early 1986

3. Trade deficit turned upward

4. Improved trade picture has boosted economy in 1987

a. Industrial production: +3.5%

b. Investment: +1.5%

c. Manufacturing employment: +1.0%

D. Improvements in the trade and manufacturing sectors in 1988 will be smaller

1. Congress and the Reagan Administration continue to have difficulty agreeing how to cut the deficit further

a. Some estimates of 1988 budget deficit are as large as $175 billion

b. At least in part, the stock market reacted to this stalemate

SLIDE 5: U.S. PRESIDENTIAL ELECTIONS AND ECONOMIC GROWTH

A. The budget stalemate is affected in an important manner by the upcoming U.S. presidential election

1. There is a significant relationship between economic growth and election outcomes

a. Poor economic performance typically implies a loss for the incumbent party, i.e. 1960 and 1980

b. Good economic performance typically implies the opposite, i.e. 1964 and 1984

c. Relationship is far from perfect, i.e. 1948

2. Both political parties are certainly aware of this relationship

B. Reducing the budget deficit would remove a short-run fiscal stimulus from the economy

1. This may not be offset by positive impacts on the trade balance

2. With this risk, the incumbent party is not likely to lobby for a substantial reduction in the deficit

ANSWER 1---DISAGREE

SLIDE 6: FARM INCOME AND FINANCE

QUESTION 2---A second wave of farm financial problems will hit agriculture in the late 1980s and early 1990s.

SLIDE 7: NET CASH INCOME OF THE FARM SECTOR

A. The financial situation of agriculture has improved during the last two years. The most obvious indicator of the improvement has been the strong growth in net cash income of the farm sector.

1. Each year since 1984, nominal net cash farm income has reached a new record high

a. 1984 = $38.8 billion

b. 1987 = $56.0 billion

c. Annual average growth rate of 11%

2. Performance of net cash income in real terms has also been impressive

a. 1984 = $36.0 billion

b. 1987 = $ 47.0 billion

c. Annual average growth rate of 7.3%

d. Only in 1973 and 1974 was real farm income substantially higher than in 1987

B. The outlook for farm income in 1988 and beyond is not as positive.

1. Nominal net cash income in 1988 may fall $2-4 billion

2. Projected downturn is a direct result of the reversal in the movement of three components of farm income

a. Government payments

b. Livestock profits

c. Production expenses

SLIDE 8: FARM PROGRAM PAYMENTS

A. The first factor related to the increase in farm income is the rapid rise in farm program payments

1. Chart shows the sum of direct payments and net CCC loans

a. The bulk of direct payments are made in the form of deficiency and acreage diversion payments

b. Net CCC loans are included because a CCC loan is a free put option to sell grain to the government at the loan rate

2. Total payments rose from $1.8 billion in 1980 to $20.1 billion in 1986

3. Projected to be $15.5 billion in 1987

4. Farm program payments as a percent of net cash farm income

a. 1985: 41.2%

b. 1986: 38.6%

c. 1987: 27.7%

d. Average 85-87: 35.8%

B. Total farm program payments are likely to decline over 1988-1990 for two reasons

1. Target prices for feed grains, wheat, rice, and cotton are permitted to decline 8-10% under the provisions of the Food Security Act of 1985

a. Implies a decline in deficiency payments of $2-3 billion

b. Note that reductions in target prices are at the discretion of the Secretary of Agriculture

2. Pressure to reduce the Federal budget deficit may result in additional reductions in target prices

a. If Congressional and Administration budget proposals cannot be reconciled, then an 8.5% reduction in 1988 farm program payments will be necessary under the provisions of the Gramm-Rudman Act

b. The crash of the stock market has increased the pressure to deal with the deficits, and hence, increased the likelihood of reductions in farm program payments

SLIDE 9: CHANGE IN NET CASH INCOME OF LIVESTOCK ENTERPRISES

A. The second factor driving the increase in overall farm income is the profitability of livestock production

1. The rise in livestock profits primarily reflects the coincidence of

a. Low production and high price points in the pork and beef production cycles

b. The policy decision to reduce the loan rates for feed grains

2. Changes in net cash income were dramatic in 1986 and 1987

	Poultry	Dairy	Meat Animals	Total
		(billion dollars)		
1986	+1.5	+0.9	+1.4	+3.8
1987	+1.9	-1.3	+5.9	+6.5

3. Total gain in income for the two years was $10.3 billion, or 42%

B. Livestock profits are likely to be reduced sharply in the next 2-3 years

1. Producers will respond to profits by increasing production

a. Prices and profits will fall to more "normal" levels as a result

b. This process is most evident in poultry and pork production in late 1987

2. Livestock profits are not protected by government price and income programs

SLIDE 10: GROSS CASH FARM EXPENSES

A. The third factor related to the increase in farm income is the decline in production expenses

1. Expenses fell over $20 billion, or 17%, in the three year period 1985-1987

2. The 1986 decline of almost $10 billion was the largest since 1932

B. Further substantial declines are not expected

1. 1988 expenses are expected to decline only about $1 billion

2. This conclusion is based on the outlook for the use and price of agricultural inputs

SLIDE 11: CHANGE IN THE VOLUME AND PRICE OF SELECTED FARM INPUTS, 1985 THROUGH 1987

A. The reduction in production expenses has been primarily a function of declines in the volume of input use

1. With the one exception of land, the percentage decline in the volume of input use substantially exceeded the change in price

	Volume	Price
Debt	-22%	-7%
Labor	-14	+10
Chemicals	-14	-4
Land	-7	-19

2. Reduction in the volume of debt reflects pay-downs and write-offs

3. Reductions in the volume of the other three inputs largely reflects the impact of large acreage set-aside programs

4. The substantial reduction in the input price of land is the result of declines in market rents

B. Further substantial declines in total farm expenses are not expected, given the outlook for the use and price of inputs

1. Large acreage reductions in 1986 and 1987 have nearly balanced production and consumption

   a. As a result, additional reductions are not likely to be needed in the future

   b. Volume of crop input use will stabilize

2. Debt volume will continue to fall in the future, but interest rates are unlikely to decline further and may well increase

SLIDE 12: PURCHASED FARM INPUT PRICES

A. The price of all major purchased production inputs is expected to increase in 1988

1. This will reverse the downward trend established over 1985-1987

2. Fuel prices at the farm-level largely reflect the price of crude oil

    a. Crude oil prices are expected to increase only marginally in 1988

    b. Two important unknowns may alter this outlook

        i. Developments in the Iran-Iraq war could quickly reduce the supply of oil

        ii. Due to financial pressures, many members of OPEC are pumping more than their agreed upon output

        iii. Prices could abruptly move up or down as a result

3. Machinery prices have been under pressure since 1984 due to falling sales and large inventories

    a. The price index shown on the chart reflects list prices, which are expected to increase in 1988

    b. The index is likely a good indicator of the trend of machinery prices, but not the magnitude of price changes

        i. Dealers have been selling machinery at large discounts from list prices for at least three years

        ii. Comprehensive data on discounts is not available, so it is hard to estimate the price impact of the discounts

        iii. Discounts on large tractors and combines have been reported to be as large as 20 to 40%

4. Fertilizer prices have declined 21% since the spring of 1984

    a. Acreage reduction programs have sharply curtailed demand

    b. In 1987, the industry reduced production through plant closings, consolidations, and mergers

    c. Despite the production cutbacks prices fell

    d. Ample supplies are expected to be available in 1988 and marginally higher prices

5. Chemical prices have also declined in recent years

    a. Acreage reduction programs have sharply reduced chemical demand

    b. Herbicide use has borne the brunt of the decline

    c. Adequate supplies are expected to be available at only slightly higher prices in 1988

B. Combined with an outlook for stable input use, the increase in input prices suggests that the period of sharp declines in production expenses is over

SLIDE 13: FARMLAND VALUES IN THE EASTERN CORNBELT

A. The residual claimant of farm income is farmland

1. Increase in farm income in the 1970s is associated with the boom in farmland values in the late 1970s

2. Decrease in farm income in the early 1980s is associated with the subsequent bust in values

3. Farm income has risen again in the last three years

a. Based on historical patterns, this should begin to be reflected in land values

b. An upturn in land values has been reported in 1987

Federal Reserve District Farmland Values

	Chicago	Minneapolis	Kansas City
	(percent change from previous quarter)		
1987I	+0.4	+2.7	+0.3
1987II	+1.6	+4.5	+2.3

c. Ohio farmland values

i. 1987: $942/acre

ii. 1988: $980-1000/acre, up 4 to 6%

B. The outlook for farm income suggests that the upturn in farmland values may be short-lived

1. Scenario:

a. Farm income declines $10 to 15 billion over the next three years

i. Reduction in government payments

ii. Decline in livestock profits

b. The 30% decline in income is translated into about a 30% drop in farmland values

c. Ohio farmland values drop to about $700/acre

2. A number of reasons why the scenario may be overly pessimistic

   a. Drop in livestock profits will likely not be translated one-for-one into declines in farmland values

      i. Link between land values and livestock profits is not direct

   b. Weather problems in other countries could quickly alter the outlook

   c. Government could change programs to support farm income

3. The previous exercise does illustrate that further and substantial declines in the value of farmland could plausibly occur

4. The risk of further declines in farmland values has important implications for producers who are in financially stressed or vulnerable condition

SLIDE 14: FINANCIAL STRESS IN U.S. AGRICULTURE

A. Financial stress in U.S. agriculture has declined since 1985

1. Financial stress categories based on an operator's return on assets, return on equity, equity level, and debt-to-asset ratio

2. Percent of commercial operators in the stressed or vulnerable categories declined about one-third since 1985

   a. 1985: 17%

   b. 1987: 12%

   c. 1988: 8-10%

3. Percentage of debt owed by the same operators has fallen at about the same rate

   a. 1985: 33%

   b. 1987: 21%

   c. 1988: 13-15%

B. These data suggest that the most severe phase of the farm financial crisis is over

1. However, a large number of producers and an even larger proportion of farm debt are still in stressed conditions

2. This group is especially vulnerable to a downturn in farm income and land values

3. The "second wave" of farm financial problems is not likely to be nearly as severe as the first

4. This outlook overwhelmingly suggests that all efforts should be made to work out financial problems while farm income remains at its current high levels

ANSWER 2---AGREE

SLIDE 15: AG TRADE AND POLICY

QUESTION 3--Elimination of agricultural subsidies and tariffs by all countries will result in an increase in U.S. agricultural exports.

SLIDE 16: GATT - GENERAL AGREEMENT ON TARIFFS AND TRADE

A. GATT is a multilateral trade agreement among 93 countries

B. The first GATT agreement was signed in 1947

C. Six agreements since 1947 have each progressively lowered tariff barriers

D. Current negotiations - the Uruguay Round - began in September 1986 and are the first to include agricultural tariffs

   1. U.S. received waiver in 1955 to limit imports of agricultural products

   2. This waiver served as precedent for other countries to protect their agriculture

   3. Large increases in government budget costs for agricultural programs and recognition that farm policies have depressed world markets led to the current discussions on agriculture

   4. Participants have agreed to:

      a. Negotiate reductions in ag. support levels

      b. Change domestic farm policies in order to reduce policy impact on trade flows and agricultural prices

E. Major participants include the U.S., the EEC, Japan, Canada, Australia, and Mexico

F. Non-members include the USSR and China

SLIDE 17: POLICIES AFFECTING TRADE

A. There are a number of policy forms that affect trade

1. Producer subsidies or taxes - change farm prices

2. Consumer subsidies or taxes - change consumer prices

3. Export subsidies or taxes - change export prices

4. Import tariffs or quotas - increase domestic prices

E. Comparing combinations of these policies across countries is difficult and slows negotiations

1. Several overall measures of country level agricultural support have been developed and are being evaluated. One is called a Producer Subsidy Equivalent (PSE)

SLIDE 18: GATT: PRODUCER SUBSIDY EQUIVALENT (PSE) - 1982-84

A. A PSE is a composite measure of the percent of gross farm income that is transferred to farmers through government programs

B. PSE's can be compared across countries

C. Representative PSE's for the 1982-84 period are:

Japan	72
South Korea	64
Mexico	40
EEC	33
Canada	22
U.S.A.	22
Taiwan	18
Australia	9
Brazil	7
Argentina	- 22

D. Developed countries generally have high PSEs - low income countries generally have low PSEs

E. Lower world agricultural prices today and the lower dollar mean that most PSEs are higher now than in 1982-84

SLIDE 19: GATT: MAJOR COUNTRY POLICIES

A. Japan, with a PSE of 72, is a major agricultural importer

1. Agricultural policy in Japan relies principally on import restrictions for grains, livestock, dairy and sugar

2. Income enhancement is provided to oilseeds and dairy

B. The EEC, with a PSE of 33, is both an importer and an exporter

1. Like Japan it provides import restrictions on grains, livestock, dairy, and sugar but adds export enhancement to each of these commodities as well

2. Income enhancement is provided to oilseeds and dairy

C. The U.S. by contrast is principally an exporter and relies more on income enhancement, principally for grains, oilseeds and dairy

1. Import restrictions are used for livestock, dairy and sugar

2. Export enhancement is used for grains, especially wheat

D. The GATT negotiating position for each country is conditioned by

1. Its status as an agricultural importer or exporter

2. Current agricultural and food policies

SLIDE 20: GATT: U.S. POSITION

A. A sense of urgency - U.S. proposes a fast two year track for concluding an agreement

B. The stated U.S. position is the following:

1. All U.S. programs that affect agricultural trade are negotiable if similar programs in other countries are given equal consideration

a. Market price supports

b. Income supports

c. Subsidized inputs and credit

d. Research and structural investments

2. A measure such as a PSE for determining commodity and overall country support to agriculture would be developed and agreed to

3. All agricultural commodities, food, beverages, forest products, and fish would be covered

4. Agricultural support that is decoupled from markets or production would be exempt from GATT rules, as would foreign and domestic aid programs

B. A 10 year timetable

1. First, all subsidy and import barriers would be frozen at current levels

2. Over a period of 10 years eliminate:

   a. All agricultural subsidies that directly or indirectly affect trade

   b. All export subsidies

   c. All import barriers

3. Standardize health and sanitary regulations

C. Lead by example -

1. Bilateral free trade agreements now being negotiated with Canada and Mexico will serve as examples for the broader multilateral agreements under GATT

SLIDE 21: GATT: EEC POSITION

A. A go slow approach

1. Short term market sharing to protect their current export markets

2. Reduce agricultural subsidies

3. Re-negotiate tariffs - they would like to impose import tariffs on oilseeds and corn by-products

4. Decouple farm aid from production incentives

   a. This is consistent with the U.S. position

SLIDE 22: GATT: JAPAN POSITION

A. Generally disinterested but:

1. Consumerism is rising with demands for lower cost food supplies

2. Current subsidy is largely consumer based therefore any lowering of subsidy will create substantial market opportunities for U.S. agriculture

SLIDE 23: GATT: EXPECTED CHANGES

A. Land prices will decline in countries with positive PSEs

B. Meat consumption will rise, especially in Japan and somewhat in the EEC

1. World meat prices should rise

C. Grain exports and prices will rise

D. Dairy production and prices will decline

E. Sugar production and prices in the EEC, U.S., and Japan will decline

   1. World sugar prices will rise

F. Overall agricultural trade volume and U.S. share - up

ANSWER 3---AGREE

SLIDE 24: PACIFIC RIM TRADE PROSPECTS

QUESTION 4---<u>The U.S. faces declining markets in the Pacific Rim because of rising output in China</u>.

SLIDE 25: MAJOR PACIFIC RIM AG MARKETS

A. The Pacific Rim is the fastest growing market for U.S. agricultural products

B. More importantly it has the potential to become a much larger future market

   1. The keys to unlocking this market potential are:

      a. Policy change to remove import barriers

      b. Income growth to spur diet change and expand consumption

      c. Each country has a different mix of these needed changes and level of market potential

C. Major Pacific Rim countries include:

1.	China	1,100 million people
2.	Indonesia	162
3.	Japan	121
4.	Philippines	55
5.	South Korea	41
6.	Taiwan	20

D. Four countries are important future agricultural growth markets; Japan, South Korea, Taiwan, and China

   1. They provide significant contrasts in:

a. Size of economy

b. Size of agricultural sector

c. Stage of economic development

d. Agriculture and food policies

SLIDE 26: MARKETS FOR U.S. AGRICULTURE

A. Three of the Pacific Rim countries are currently in the top ten U.S. markets and are growing in importance, they are: Japan, South Korea, and Taiwan

1. In 1986, they accounted for about 30% of U.S. agricultural exports up from 25% in the early 1980's

B. China was number 10 in the early 1980's, declined as a market in the mid 1980's, is now returning as a market and holds tremendous future potential

SLIDE 27: U.S. PACIFIC RIM EXPORT MARKETS: RANKING - 1986

A. Japan is by far the largest U.S. market at about 17% of U.S. agricultural exports (20% in 1986)

1. It ranks first in all major commodities except oilseeds where it has a number two ranking

a. The Netherlands ranks first in oilseeds but re-exports oilseed products

B. South Korea ranked 6th in the early 1980's, and had advanced to a 4th position by 1986

1. It was the 2nd most important market for wheat and livestock, seventh for coarse grains and 10th for oilseeds

C. Taiwan, with a population of only 20 million people rose from 8th to 5th position as a U.S. market

1. Taiwan ranks 3rd for coarse grains and livestock products, 5th for oilseeds and 8th for wheat

D. Future market growth potential depends on population level, income level and growth, and food and agricultural polices

SLIDE 28: FOOD CONSUMPTION AND INCOME, 1961-82

A. Food consumption measured in cereal equivalents per capita increases 5-7 fold as a countries increases per capita incomes from low levels (under $400) to high levels ($10,000)

B. China is just initiating economic development

1. Income per capita is about $400

2. Food consumption per capita is about one-half the level in Taiwan and South Korea

3. China's goals in next ten years include:

    a. Mechanize agriculture

    b. Move 100 million people from agriculture to rural industries

    c. Raise income levels to $2,000 per capita - to present day Taiwan and South Korea levels

        i. This will double current food needs for over one billion people

4. China has 7% of worlds arable land (U.S.-14%)

5. Diet changes will require sharp increases in livestock products and associated feed grains and protein supplement feeds

6. A substantial market potential will exist - trade relationships need to be developed

C. South Korea and Taiwan are middle income countries with rapidly growing economies and increasing food needs

1. In the 1960-80 period agricultural production doubled but food consumption tripled

2. Current food consumption levels are one-half of those in fully developed countries

3. Land resources in both countries are limited and most of the increased food needs will come from imports

D. Japan is one of the most highly developed countries with a per capita income level of at least $12,000

1. Very limited land resources make Japan the principal food import market in the world

2. Yet food consumption levels are similar to South Korea and Taiwan

3. Food price policies are responsible for the low consumption levels

    a. Relative to South Korea, steak in Japan is 7 times as costly, rice twice as high, and a representative "basket of groceries" more than double in Japan

4. Consumerism is rising and GATT negotiations may force a lessening in the import restrictions that give rise to the high food prices

    a. The large Japanese market could grow substantially larger in the years ahead

E. All major markets in the Pacific Rim have strong growth potential

    a. Japan with food policy changes

    b. Other countries with income growth

ANSWER 4: DISAGREE

SLIDE 29: 1987 PRICE FORECASTS

A. What we said last year

1. Chart shows forecast and actual percent change in annual average prices

    a. Direction of price change forecast correctly for five of six commodities

    b. Hogs were forecast to be down 3% and were actually up 1%, not a large error

2. Magnitude of forecasting errors was less than five percentage points except for corn

    a. Corn prices were forecast to be down 22% and were actually down 32%

B. Forecasting grades were assigned subjectively based on our past forecasting experience

1. Lowest grade was the B- for corn

2. Highest grade was the A for dairy

3. Overall grade point average of 3.4 on a scale of 4.0

4. Didn't quite make the College of Forecasting Dean's List, but it still was a good year

SLIDE 30: RED MEAT OUTLOOK

QUESTION 5---Livestock cash receipts currently account for an increasing proportion of total cash farm receipts, and are likely to continue this trend in 1988 due to higher hog and cattle prices.

SLIDE 31: LIVESTOCK CASH RECEIPTS

A. Prior to the jump in agricultural exports in 1973, livestock and livestock products accounted for an average of 55% of total cash farm receipts

1. Immediately with the increase in exports, livestock's share fell below 50%

2. Livestock's share reached a low of 45% in 1974

3. Since exports are 85-90% grains oilseeds, the export boom was clearly more favorable to the crops sector

B. Since 1982, agricultural exports have trended downward

1. Corn, wheat and soybean earnings declined $22 billion over 1981-82 through 1986-87

2. Over the same time period, livestock's share of receipts have increased, and in 1987 reached the 55% level characteristic of the 1950s and 1960s

3. Suggests livestock may be reasserting its traditional position as the primary source of cash farm earnings

C. While the recent increase in livestock's share of farm receipts is largely due to the decline in crop export earnings, there are two reasons why the re-emergence of animal agriculture is likely more permanent than transitory

1. Production costs have been lowered substantially as a result of the policy decision to lower feed grain loan rates

a. Feedstuff prices are now 30 to 50% below there early 1980s level

b. As a result livestock production costs have been reduced by 25 to 40%

c. This sets the stage for stoking consumer interest in lower priced animal-based foods

2. The long-term trend of increasing animal food prices to relative to plant food was reversed in the mid 1980s

a. Between the early 1960s and the late 1970s, the ratio of retail prices for all foods relative to meat prices (proxied by pork prices) declined from 108% to 97%

b. By 1986, the same price ratio had increased to 111%

c. This has restored some relative price attraction to animal products

SLIDE 32: PER CAPITA MEAT CONSUMPTION

A. A resurgent animal agriculture will not be structured the same as it was in the 1950s and 1960s due to changes in meat consumption patterns

1. Basic trends since the mid-1970s

a. Falling per capita consumption of beef

i. Over 1976-1987 beef consumption declined from 94.4 to 75.9 lbs., a loss of about 20%

ii. 1988: 72.8 lbs.,down 3 lbs.

b. Rapidly rising per capita poultry consumption

i. Over 1976-1987 poultry consumption increased from 52.3 to 78.2 lbs., a gain of almost 50%

ii. In 1987, poultry consumption was larger than beef for the first time in U.S. history

iii. 1988: 82.8 lbs, up 4.5 lbs and 10 lbs. larger than beef consumption

c. Basically flat per capita consumption of pork

2. A number of reasons for the changing mix of consumption

a. Health and dietary concerns

b. An aging population

c. Changing income distribution

d. Changing relative meat prices

3. Available evidence suggests changing relative prices have been the most important factor

B. The most immediate impact of the rise in poultry consumption is in the determination of red meat prices

1. Supply of poultry is of much greater importance to the level of beef and pork prices

2. Increased preference of consumers for poultry has likely changed the responsiveness of beef and pork prices to changes in their own supply

SLIDE 33: LIVESTOCK PRICES AND FEED COSTS

A. Profit margins for hog and cattle producers have widened dramatically since January 1986

1. The meat animal price index shown on the chart is a weighted average price of hogs and cattle

   a. Prices increased 21% over Jan. 86 through Aug. 87

   b. Driven by hog prices that have exceeded $60/cwt. and fed cattle prices that have exceeded $70/cwt.

2. Feed costs are measured by the index of feed grain and hay prices

   a. Costs declined 29% over Jan. 86 through Aug. 87

   b. The impact of lowering feed grain loan rates is apparent in the sharp price decline over Mar. 86 through Sep. 87

   c. Illustrates the large "spillover" effects of feed grains policies on the livestock sector

   d. The Food Security Act of 1985 may be best characterized as the "Full Livestock Production Act of 1985"

B. The coincidence of sharply rising output prices and rapidly declining feed costs is unprecedented and has created substantial incentives to expand both cattle and hog production

1. A large expansion requires increases in the size of breeding herds

2. Other ways producers can expand production, i.e faster turnover of the breeding herd and feeding market animals to higher weights, but these are typically short-run responses and have definite limits

SLIDE 34: HOG BREEDING HERD: GROWTH RATE

A. Hog producers reacted to increased profits by ending a two-and-a-half year liquidation of the hog breeding herd

1. 1984I-1986III average liquidation of 6.2% per quarter

2. By the second quarter of 1987 producers were expanding the breeding herd at about 9.5% per quarter

3. Despite financial pressures, hog producers responded quickly to profit incentives

   a. Note, that growth rate would likely have been higher without the widespread financial problems

B. Growth rate of the hog breeding herd is an indicator of hog marketings 3 to 4 quarters later

1. 1988I: +8%

2. 1988II: +10%

3. 1988III: +10%

4. 1988IV: +12%

SLIDE 35: HOGS: BARROW AND GILT PRICES AT 7 MARKETS

A. By recent standards, hog prices moved in a narrow trading during 1985

   1. Prices ranged from $40 to $50/cwt., with an average of about $45/cwt.

   2. Prices did exhibit normal seasonal price pattern of highs in the summer and winter and lows during the spring and fall

B. The bull market in hogs began in the second quarter of 1986 when prices went from $40 to $60/cwt.

   1. Price increase was the result of production cutbacks during late 1985 and early 1986

   2. Normal seasonal price pattern still evident, as prices declined to the low 50s by December of 1986

C. Prices were expected to follow the normal historical pattern in 1987, but the summer price peak was $10 to $15/cwt. higher than expected

   1. Appears that the primary reason for the forecasting error was inventory overcounts in the December 1986 and March 1987 USDA Hogs and Pigs Reports

   2. Prices this fall have now declined more than expected based on the September 1987 Hog Report

      a. Primary cause was a huge increase in poultry supplies

      b. Over the first three quarters of 1987

         i. Broiler production increased an average of about 7% per quarter

         ii. Turkey production increased and average of almost 20% per quarter

      c. Freezer supplies of turkey going into the holiday season are massive

         i. October 1: 3 lbs./person

ii. One medium-size turkey for every family of four in the U.S.

c. Stock market crash and higher than expected fed cattle placements also contributed to the bearish sentiment in the hog market

D. Large increases in both the supply of pork and poultry are expected to pressure hog prices in 1988

1. 1988I: $40 to $45/cwt.

2. 1988II: $38 to $43/cwt.

3. 1988III: $42 to $48/cwt.

4. 1988IV: $36 to $42/cwt.

E. Note that with lowered feed costs, breakeven price is $36 to $38/cwt.

1. Price projections suggest producers will make at least modest profits for much of 1988 as a result

SLIDE 36: BEEF BREEDING HERD: GROWTH RATE

A. Beef producers have also reacted to increased profits by ending a lengthy liquidation of the beef breeding herd

1. Liquidation began in 1983

2. Upturn in growth rate actually began in 1985

3. Upturn accelerated in 1987, and growth rate is expected to be about zero in 1988

a. First non-negative growth rate in seven years

B. Growth rate of beef breeding herd has not turned positive for two reasons

1. Long production lags prevent the cow herd from expanding as quickly as the sow herd

2. Considerable uncertainty as to whether beef prices will support an expansion

a. Compared to the previous similar point in the cattle cycle, 1978-79, per capita poultry supplies are 40% higher

b. Pork supplies are expected to increase 8 to 10% in 1988

C. Growth rate of the beef breeding herd is only a rough indicator of future beef supplies

1. Long production lags mean that as liquidation is ended, production will fall substantially for an extended period

2. Numerous ways beef producers can increase or decrease marketings in the short-run

D. Beef production

1. 1988I: NC to +2%

2. 1988II: -3 to -5%

3. 1988III: -2 to -4%

4. 1988IV: -1 to -3%

SLIDE 37: FED CATTLE PRICES: CHOICE STEERS

A. The normal seasonal pattern for fed cattle prices is a single peak in prices in late spring and early summer

1. Almost the opposite occurred in 1985 and 1986

2. In 1986, the spring price weakness could be traced to supply impacts of the Dairy Herd Termination Program

B. The price pattern in 1987 has been consistent with the normal seasonal price pattern

1. Prices peaked in April at about $75/cwt.

2. Similar to hog prices, fed cattle prices have declined more than expected

a. In early November, the low $60s

b. Factors moving prices lower

i. October Cattle-on-Feed Report indicated that feedlot placements were much larger in the third quarter than expected

ii. Large supply of poultry and pork

iii. Concerns that economic growth may slow after the stock market crash

C. With beef supplies expected to be down again in 1988, the price outlook appears to be highly positive

1. But, higher prices in 1988 are unlikely in the face of much higher pork and poultry supplies

2. It is possible, though, that marketings will be moved forward enough late this year and early next year that prices next spring could be higher than expected

3. 1988I: $60 to $65/cwt.

4. 1988II: $62 to $68/cwt.

5. 1988III: $60 to $66/cwt.

6. 1988IV: $58 to $64/cwt.

ANSWER 5---DISAGREE

SLIDE 38: DAIRY OUTLOOK

QUESTION 6---<u>Dairy supply management programs effectively reduce milk production in the short-term, but have less impact on reducing surplus production over time</u>.

SLIDE 39: PER CAPITA CONSUMPTION OF MILK PRODUCTS

A. Per capita consumption was 594 pounds in 1986, unchanged from 1985 but up 50 pounds from 1980

B. Per capita commercial consumption was 545 pounds in 1986 up 38 pounds from 1980

C. The difference, 49 pounds, is government donations from CCC stocks and has grown from 36 lbs. in 1980

SLIDE 40: MILK PRODUCTION, COWS, AND MILK PER COW

A. The number of milk cows declined 3.6% in 1987

1. Due to the dairy termination program

2. Contrasts with a 1.4% decline in 1986 and a 1.8% increase in 1985 following the end of the diversion program

3. For 1988, a slight increase of about .4% in cow numbers seems likely

a. The ratio of replacement heifers per 100 cows = 43.3 on July 1, 1987

b. This is well above the historic standard of 35

c. Milk cow prices are up 12% in mid 1987 over mid 1986

d. Offsetting are stronger cull cow prices, up about 15% in 1987 and expected to hold at this higher level in 1988

B. Production per cow

1. Following the 1984 down-turn, has returned to the growth trend established since 1978

2. 1987 = 13,600 lbs/cow, + 2.3% from 1986

   a. Ohio = 12,888 in 1987

      i. 95% of national average

      ii. No change from 1986

3. Another 1-2% increase appears likely in 1988

   a. Milk-feed price ratio continues to favor heavier feeding rates

   b. Many of the less productive herds went out in the Dairy Termination Program

C. Total milk production

1. 1987 milk production = 142.1 billion pounds, down 1.4% from 1986

2. 1988 production forecast to be up 2-3%

   a. Slight increase in cow numbers

   b. Increase in per cow production

SLIDE 41 MILK: U.S. BLEND AND SUPPORT PRICES AND CCC PURCHASES

A. The CCC purchases reflect the amount of excess milk production over commercial demand

1. CCC purchases peaked at 16.8 billion pounds or 12% of total production in 1983

2. Declined sharply to 8.6 billion lbs. (6.4% of production) with 1984's production cut-back

3. Have trended downward since the 1983 peak despite production increases

   a. Due primarily to increased commercial use

   b. Commercial disappearance in 1987 = 137 billion lbs. + 2.2% over 1986

4. Will bottom out at about 5.6 billion lbs. in 1987

5. CCC purchases will increase to the 6.5 billion lb. level in 1988

B. Note the relationship between government purchases and the premium between blend price and support price

1. When purchases increase, premium narrows

2. Vise versa

C. Support price

1. Peaked at $13.49 cwt during 1981

2. July 1, 1985 = $11.60

3. January 1, 1987 = $11.35

4. October 1, 1987 = $11.10

5. January 1, 1988 forecast = $10.60

6. For 1989 and 1990

a. Support price = $10.60, unless

b. Projected annual surplus purchases are more than 5 billion pounds, then - 50 cents, or

c. Projected annual surplus purchases are less than 2.5 billion pounds, then +50 cents

D. Blend prices

1. 1987 = $12.55

a. About $1.25 over posted support price

b. 10-20 cents over support price in 1979 and 1980 when CCC purchases were increasing rapidly

2. For 1988

a. The average support price will be about 70 cents lower than in 1987

b. Continued low CCC purchases should keep blend price premiums at about $1.50 and blend prices at about $12.10 cwt down 45 cents from 1987

ANSWER 6---AGREE

SLIDE 42: WHEAT OUTLOOK

QUESTION 7--The surge in wheat exports during the past year is based on increased purchases from numerous countries and extensive U.S. export subsidies.

SLIDE 43: WHEAT: SUPPLY AND USE

A. 1987-88 supply is 3.94 billion bushels, down 1.7% from last years record

1. Total supply for 1987-88 is within the narrow range of 3.9 to 4.0 billion bushels registered since 1981

2. Production was 2.1 billion bushels, up 1.1% from 1986

a. Harvested acreage was 55.4 million acres down 9% and the lowest level since 1973

b. Yields averaged 38.2 bushels per acre, up 11% from the weather reduced 1986 crop and the third largest ever

3. Carry-in was 1.8 billion bushels, down 4.7% from last year's record

a. Carry-in equals 81% of projected use

B. Use is projected to be 2.2 billion bushels, up 1.5% from last year

1. This is still 11% percent below average use during 1981-1984

2. Domestic use is projected to be about 1.0 billion bushels down about 16%

a. Feed use will decline by more than 50% as wheat prices are substantially above corn prices in the corn belt

3. Exports are projected to rise into the 1.2 billion bushel range, up over 20% primarily on the strength of EEP sales

a. Exports will still be below the 1981-84 average of 1.5 billion bushels by about 18%

4. Carryout for the 1987-88 marketing year is projected to be 1.7 billion bushels

a. Down 6% from the 1986-87 carry-out

b. The stocks-use ratio is projected to be in the 77% range

SLIDE 44: WHEAT: OHIO AVERAGE FARM PRICES

A. Ohio wheat prices declined sharply during June-September in both 1985 and 1986

B. This pattern was broken in 1987 as prices rallied from July through October primarily on the basis of a strong export performance

C. Larger supplies of soft red winter wheat will reduce SRW price premium relative to other wheat classes

   1. Production of SRW was up a strong 20%

   2. But, EEP targeted markets (China) will increase exports of SRW 40%

   3. A drawdown of SRW stocks may evolve from expanded disappearance

SLIDE 45: WHEAT: U.S. EXPORTS, 1986-87 (June 1 - Oct. 29)

A. Wheat exports were up sharply, rising 25% during the first five months of the 1987 market year

B. This contributed to early price strength

C. Increased sales were more than accounted for by the return of USSR and mainland China markets

   1. Sales to the rest of the world were off 18%

   2. USSR-China sales were primarily Export Enhancement Sales

D. World wheat market is characterized by stable demand and is over supplied

   1. Export subsidies are needed to maintain current overseas sales volume and domestic price strength

ANSWER 7---DISAGREE

SLIDE 46: CORN OUTLOOK

QUESTION 8---<u>Driven by tight free-stocks, corn prices are likely to be equal to or above loan redemption levels in the summer of 1988.</u>

SLIDE 47: CORN: SUPPLY AND USE

A. 1986-87 marked a turning point for the corn market

   1. Total supplies and carry-out stocks reached record highs

   2. Prices were the lowest in 14 years

   3. But, the sharply lower prices encouraged greater use

      a. Domestic disappearance reached an all-time high of 5.9 billion bu.

      b. Exports increased 23%, reversing a 6-year downtrend

4. With stable production prospects, this sets the stage for a gradual upturn in the market

B. 1987-88 supply prospects

1. Carryover old crop supplies on September 1, 1987 were just under 4.9 billion bu., the largest ever

    a. Enough stocks to meet two-thirds of expected use in 1987-88

    b. Result was that nearly any size 1987 crop would be adequate to supply market needs

2. 1987 corn harvest is estimated to be 7.14 billion bu.

    a. 13% less than the 1986 harvest

    b. 19% less than the record 1985 harvest

    c. The smaller crop reflected a 10 million acre reduction in plantings

        i. Excluding 1983, acreage was smallest since 1973

        ii. Reductions the result of participation in government acreage set-asides, paid diversion, and conservation reserve programs

    d. U.S. average corn yield is estimated to be a record 119.9 bushels per acre

        i. Ohio yield: 128 bu./ac.

        ii. Record yield is due to excellent planting weather, generally good growing conditions, and enrollment of the least-productive acreage in set-aside programs

3. Combined with carry-in, the production results in total supplies for 1987-88 of 12.0 billion bu.

    a. 2.2% smaller than in 1986-87

    b. Represents 160% of projected use

C. 1987-88 use prospects

1. Exports in 1987-88 are expected to be about 1.70 billion bu.

    a. Another double-digit gain, 11%

    b. Exports have gotten off to a fast start

i. Through the first five weeks of the marketing year export shipments were up 47%

c. Strength reflects a variety of factors

i. Low prices have kept U.S. corn competitive in world markets

ii. Government export subsidies

iii. Smaller grain crop in Eastern Europe

iv. Reduced exports from South Africa

v. Continued expansion in exports to China, South Korea, Japan, and Mexico

d. Negative factors include

i. Larger coarse-grain harvest in the Soviet Union

ii. Increased production and exports from Argentina

2. Industrial,food, and seed use are projected to be 1.22 billion bu.

a. Increase of only 3%

b. Most markets for processed corn products appear to be saturated

c. Ethanol use has the most potential for growth in the near-term

i. Air pollution may be reduced by the burning of "oxygenated fuels"

ii. Ethanol qualifies as an oxygenated fuel

iii. Some states have already mandated use of such fuels during certain times of the year

iv. National legislation would dramatically increase ethanol use

3. Feed use is projected to reach a new record level of 4.72 billion bu.

a. Increase of 2%

b. Follows an increase of 13% in 1986-87

c. Number of grain consuming animal units will increase 2 to 3%

i. Higher hog and poultry numbers will offset any declines in beef numbers

d. Feeding rates are unlikely to increase any further

i. Higher corn prices and lower livestock prices will pressure feeding margins

4. Total use is projected to be 7.6 billion bu., up about 3%

5. This implies a carryout at the end of the 1987-88 marketing year of 4.4 to 4.6 billion bu.

   a. A 6 to 8% decline

   b. 210 to 220 day supply

   c. Despite improvement will be second largest carry-out on record

SLIDE 48: CORN: STOCKS-PRICE/LOAN RELATIONSHIP

A. The burdensome nature of the current stocks situation is clearly illustrated by examining the historical relationship between ending stocks and the ratio of season average corn price to the loan rate

   1. When carryout exceeds about 1 to 1.2 billion bushels, prices tend to average near the price support loan rate

   2. Carryouts of less than about 800 million bushels appear to be necessary to drive prices above loan rates

B. The projected carryout of 4.4 to 4.6 billion bu. for 1987-88 is clearly far in excess of the level necessary to move prices above the loan rate

C. In 1986 the price ratio, .83, was the lowest in the last 25 years

   1. This reflects the impact of the generic PIC certificate program on market prices

   2. If enough certificates are issued, "PIC and roll" will assure that all of the markets need for government-held stocks can be met without prices moving to loan redemption levels

   3. The supply of certificates will be an important determinant of both the level and seasonal pattern of corn prices in 1987-88

SLIDE 49: CORN STOCKS SITUATION

A. This table outlines the prospects for free stocks of corn at the end of the 1987-88 marketing year

   1. Projected carryout on September 1, 1988 is between 4.4 and 4.6 billion bu.

   2. Gross stocks isolated from the market

a. 1987 loan placements are projected to be 4.1 to 4.4 billion bu.

i. About 60% of corn crop

b. FOR stocks on Sept. 1, 1988 are projected to be 1.5 billion bu.

c. CCC stocks on Sep. 1, 1988 are projected to be 1.3 to 1.5 billion bu.

d. Extended 1986-87 loans are projected at 1.0 to 1.2 billion bushels

e. Summing the four categories results in gross isolated stocks estimate of 7.9 to 8.6 billion bushels

3. "Leakage" of isolated stocks

a. FOR rotation of stocks projected to be 0.8 to 1.0 billion bu.

b. Key variable is the stocks made available to the market through PIC redemptions

i. Unless advanced deficiency payments are made on the 1988 crops, total certificate issuances in the Oct.87-Sep.88 period will be about $5.2 billion

ii. About 75% of certs were used to redeem corn stocks last year

iii. Implies total certs available for corn PIC and roll of about $4 billion

iv. At an average posted county price (PCP) of $1.70/bu., this implies redemptions of 2.2 to 2.4 billion

c. Total of two categories is 3.0 to 3.4 billion bushels

4. Subtracting "leakage" from gross isolated stocks yields a net isolated stocks figure of 4.9 to 5.2 billion bushels

5. Factoring in a minimum pipeline level of free stocks of 500 million bushels, this implies the market will need regular CCC loan redemptions of at least 1.0 to 1.1 billion bushels

6. Regular redemptions will require corn prices to move towards loan redemption levels by late spring-early summer

a. About $1.90/bu. in major Ohio markets

B. Primary uncertainty is the size of additional certificate issues beyond those already announced

1. Several potential sources of additional certs

a. Increased proportion of final 1986 twelve-month and 1987 five-month deficiency payments paid as certs

b. Land diversion payments

c. Advanced deficiency payments on 1988 crop

d. Export enhancement payments and targeted export assistance payments

2. A minimum of $2.5 to 3.0 billion in additional certificates will have to be issued to prevent corn prices from moving to loan redemption levels

   a. Whether this occurs depends on how strongly the CCC adheres to a policy of low prices to encourage use

SLIDE 50: CORN: OHIO AVERAGE FARM PRICES

A. Seasonal price pattern for 1985-1986

   1. Steep drop in the last quarter reflects the adjustment to lower loan rates

B. Lower price surface is reflected in the pattern of prices over 1986-87

   1. A seasonal rise in corn prices did occur

      a. Prices moved from harvest lows of $1.30 to 1.35 to a peak of $1.75 in July

   2. Dominant event in the past year was the unexpectedly large volume of stocks put onto the market through PIC redemptions

      a. Depressed prices 10 to 20 cents per bushel throughout the year

C. Prices are expected to follow a similar seasonal pattern in 1987-88

   1. Improvement in overall stocks situation and expectation of tight free stocks suggests that prices will average $1.60 to $1.80/bu.

      a. Compared to 1986-87 average of $1.51/bu.

   2. Prices may be weak through the end of the year as the tax status of PIC certificates has been altered

      a. If CCC loan is redeemed with certs, tax will be recognized when grain is sold, not at the time of redemption

      b. Will encourage PIC redemptions this fall that would have been deferred otherwise until 1988

3. Prices are expected to reach loan redemption levels in the late spring-early summer

    a. About \$1.90/bu.

    b. Note, expected price rise could be negated by a policy decision to increase the supply of certificates

SLIDE 51: 1988 CORN PROGRAM

A. The announced 1988 corn program consists of a 20 percent unpaid acreage reduction and lower loan rates and target prices

    1. Loan rate: \$1.74/bu., down 4%

    2. Target price: \$2.97/bu., down 2%

    3. A paid diversion program has not been announced

    4. Sign-up has been delayed until after the mid-November budget reconciliation required under the Gramm-Rudman Act

B. Program provisions may be subject to considerable change as a result of budget negotiations

    1. If automatic budget cuts are made, loan rates and cash deficiency payments will be cut 8.5%

    2. Payments made in certificates are not subject to automatic cuts

        a. The USDA may increase the proportion of deficiency payments made in certificates to avoid the cuts

    3. Unpaid set-aside requirements may be increased in an effort to reduce payments

C. Some form of a paid diversion program is likely to be announced

    1. Alternatives

        a. 0/92: producers may receive up to 92% of the allowable deficiency payment without planting any of the program crop

        b. 15% paid diversion

        c. 10% paid diversion

D. Chart shows projected returns above variable costs for a representative Ohio corn producer if they do or do not participate in the announced feedgrain program

1. Regardless of variable cost levels per acre, incentives are overwhelming to participate in the programs

2. Program advantage is the highest for the high cost producer

   a. Program returns are 4 times higher for high cost producer

   b. Program returns are 2 times higher for low cost producer

E. Incentive to participate are still large after accounting for a potential 8.5% Gramm-Rudman entitlement cut

1. Reduces return per bushel about 7 to 8 cents

F. Program returns are projected to be about the same as last year

1. But, it is difficult to make even a preliminary guess about corn acreage in 1988

   a. Uncertainty about set-aside requirements

   b. Increases in the profitability of soybean production may boost soybean acreage and reduce corn plantings

ANSWER 8---AGREE

SLIDE 52: SOYBEAN OUTLOOK

QUESTION 9---<u>Soybean meal demand in 1988 is expected to remain strong, despite historically high meal prices relative to corn.</u>

SLIDE 53: SOYBEANS: SUPPLY AND USE

A. 1986-87 saw a significant increase in soybean disappearance

1. Domestic and export demand for soybean meal was up 11% and accounted for the strength in disappearance

   a. Rising demand for livestock products in middle income countries

   b. Excellent feeding margins for domestic livestock producers

2. The increase in use was enough to generate a 10% decline in 1986-87 ending stocks

3. The better than anticipated stocks situation is expected to support prices in 1987-88

   B. 1987-88 supply prospects

1. Carryin stocks from the 1986-87 equalled 436 million bu., down 3%

a. Still second largest on record

b. Equal to about 90 days supply

2. 1987 soybean crop estimated to be 1.97 billion bushels, down about 2%

a. Good growing conditions offset a substantial drop in soybean acreage

b. 57.6 million acres planted in 1987

i. Down 5% from 1986 and the smallest acreage since 1976

ii. Acreage reduced due to entries into the Conservation Reserve Program, favorable cotton prices, and several consecutive years of weather problems in the South

c. National average yield of 34.2 bu./acre, up 4%

i. New national average record

ii. Ohio: 39 bu./acre, down 1.5 bushels from 1986

3. Total supply of soybeans equals just over 2.4 billion bushels for 1987-88

a. Third consecutive year supplies have exceeded 2.4 billion bushels

b. But only about 122% of total use

C. 1987-88 use prospects

1. Domestic use gained in relative importance in 1986-87 and the gains are expected to be maintained in 1987-88

a. Domestic crush is expected to be about 1.3 billion bu., up slightly

b. Meal use will reach another new high

i. Number of grain consuming animal units will increase 2 to 3%

ii. Partially offsetting will be an expected decline in soybean meal exports due to increasing competition from other oilmeals

c. Another factor holding back the growth in domestic use is the large surpluses in the vegetable oils market

i. Ending soyoil stocks more than doubled in 1986-87

ii. Stocks are expected to increase 20 to 30% in 1987-88

2. Exports in 1986-87 benefited from a short 1986 Brazilian crop and the slow movement of the 1987 Brazilian crop onto world markets, events that are not expected to re-occur in 1987-88

   a. 1987-88 exports are projected to drop to 650 to 725 million bushels

      i. This would be a decline of 5 to 15%

      ii. Non-U.S. oilseed production is expected to be up 7 to 10%

      iii. In Argentina and Brazil, relative prices favor soybean production over cash grains

      iv. Soybean acreage in the European Community was up 42% in 1987

   b. There are some positive signals concerning soybeans

      i. Export shipments were up 41% for the first nine weeks of the current marketing year

      ii. Oilseed imports by the Soviet Union were low in 1986-87, and any upturn should offset some of the other bearish factors

3. Total domestic use is projected to be about 2 billion bushels, about the same as last year

D. Based on the supply and use estimates, ending stocks of soybeans in 1987-88 are expected to be about 430 million bushels, about the same as a year earlier

   1. Ending stocks may be as low as 350 million bu. and as high as 500 million bu., depending on use

   2. Much of the uncertainty is related to developments in the domestic soybean meal market

SLIDE 54: SOYBEAN MEAL AND CORN PRICE AND DOMESTIC FEED DISAPPEARANCE RATIOS

A. Soybean meal and corn, to an important extent, are substitutes in animal feed rations. Examining the demand for soybean meal relative to corn yields important insights about current trends in the soybean meal market

   1. The chart shows the price and use of soybean meal relative to corn over the period 1962-1986

   2. Two distinct relationships are apparent

      a. 1962-1974

      b. 1975-1985

3. The shifting out of the demand for soybean meal has had important implications

    a. Comparing the 1975-85 demand to the 1962-74 demand, at each price ratio the demand for soybean meal relative to corn is 25 to 30% larger

    b. This has been an important factor in supporting the price of soybeans

4. Three factors likely explain the rightward shifts in the demand for soybean meal

    a. There has been a long-term trend towards improving feed rations through increased protein content

    b. The feeding of hogs in confinement has increased rapidly since the early 1960s, and the protein content of rations fed to hogs in confinement is likely higher than those produced in traditional facilities

    c. Poultry production has also increased rapidly since the early 1960s and poultry rations include proportionately higher protein levels

Protein Content on Per Unit of Feed Basis

	(percent)
Broilers	20 to 23
Turkeys	16 to 20
Hogs	12 to 15
Beef	10 to 12

B. The key question with respect to the current situation is whether the increased relative price and use of soybean meal in 1986 signals another rightward shift in demand

1. The stakes are high for soybean producers

2. If 1986-87 demand for soybean meal had followed the 1975-1985 relationship, then the use of soybean meal would have been 17% lower

3. Factors in favor of an outward shift

    i. Poultry production has increase sharply

    ii. Pork production is also on the rise

4. Counter argument is that high relative price is simply an aberration due to the one-time lowering of the loan rate for corn. Prices will return to "normal" levels after producers have time to react

C. Projections for 1987-88 suggest an outward shift is the most likely explanation for the price strength in the meal market

1. Price ratio: 270%

2. Feed disappearance ratio: 16.25%

3. 1987-88 projections plot slightly to the right and below 1986

SLIDE 55: SOYBEANS: SUPPLY/USE - PRICE RELATIONSHIP

A. This chart demonstrates the impact of excess supplies on market prices

1. When supplies exceed about 115% of annual use

a. Prices tend to average near the loan rate

b. 1979 and 1980 were exceptions as exports jumped sharply

B. With 1987-88 supplies projected to equal about 122% of use, the loan rate is not likely to be a dominant influence on prices

1. Announced loan rate of $4.77/bu.

2. Recent strength in the soybean market reflects the improved supply situation relative to 1985-86 and 1986-87

3. Supply situation is in the range where substantial price improvement is possible if

a. Crop problems develop this winter in South America

b. Crop problems develop next summer in the U.S.

c. Use increases unexpectedly, i.e. exports to the USSR

SLIDE 56: 1987-88 SOYBEAN PRICE PROSPECTS

A. Last year we said the 1986-87 season average price of soybeans would be in the $4.60 to $5.00/bu. range

1. Actual average was $4.95/bu., towards the upper end of the forecast range

B. This year, product values suggest a somewhat higher range of price expectations

1. Soyoil prices are expected to average in the 13 to 17 cents/lb. range (basis Decatur, Illinois)

a. About the same price as in 1986-87

b. Primarily reflects the excess world supplies of edible oil

c. This generates returns of about $1.43 to 1.87 for the oil content of a bushel of soybeans

2. Soybean meal prices are expected to average in the $150 to 175/ton range (basis Decatur, Illinois)

a. Slightly higher than the price in 1986-87

b. Reflects continued strong demand relative to corn in the U.S.

c. Rapid growth of demand for meat in middle income countries will also be supportive of meal use and price

d. This generates returns of about $3.57 to 4.17 for the meal content of a bushel of beans

3. The combined product value is $5.00 to 6.04/bu.

4. A 30-60 cent crush margin must be subtracted

5. Yields a season average price range of $4.70 to 5.40/bu.

6. Higher price expectation is due to higher projected meal prices, so developments in the meal market need to be monitored closely

SLIDE 57: SOYBEANS: OHIO AVERAGE FARM PRICES

A. The 1985-86 seasonal price increase from October to May was 46 cents

B. The 1986-87 seasonal price increase from October to May was 75 cents

1. The sharp price increase last spring was the result of delayed marketing of the Brazilian soybean crop

a. Farmers held on to crops in anticipation of a lifting of internal price freezes

C. 1987-88 October price was $5.12/bu.

1. Based on product values, this is already in the upper half of the projected range of season average prices

2. Doubtful that prices will appreciate as much as last year, unless

a. Production problems in South America

b. Delayed marketings of South American supplies again

c. 1988 U.S. plantings are seriously delayed

3. If the South American crop is large, then seasonal price rise could be sharply curtailed

4. A relatively flat seasonal pattern is probably a reasonable expectation

D. CCC resale price is an effective ceiling for prices in 1987-88

1. November: 5.25/bu.

2. January: 5.36/bu.

3. March: 5.47/bu.

4. May and later: $5.58/bu.

5. CCC sales effectively ended the price rally last spring

6. Any forward pricing strategy that yields a price near the CCC resale price should be carefully considered

ANSWER 9---AGREE

SLIDE 58: 1988 OHIO CROP COMPARISONS

A. Chart compares the crops situation from a cost and returns perspective

B. Typical average yields and comparable average variable costs per acre for Ohio conditions

1. With reasonable "guesses" for average prices for the 1988 crops

C. Market returns substantially favor soybeans relative to corn and wheat

D. But, when government deficiency payments are added

1. The situation once again looks to favor corn over soybeans, and

2. 1987 looks to be another year of "farming" the government programs for cash grain farmers and cropland owners

NOTE: The total returns to corn and wheat are adjusted on a per acre basis to include returns to total (planted + idled) acreage

SLIDE 59: 1988 OUTLOOK

QUESTION 10---<u>The outlook for agriculture in 1988 is one of continued recovery and less uncertainty</u>.

SLIDE 60: 1988 SUPPLIES AND PRICES

A. The overall outlook for agriculture is for lower income in 1988

1. Crop income may be unchanged or down slightly

    a. Production down

    b. Price up more than decline in production for corn and wheat, but not soybeans

    c. But, cuts in government payments will probably offset market revenue gains for corn and wheat

2. Livestock income may be down substantially

    a. Hog: production up 9% and prices down almost 20%

        i. Implies a hog income decline of 13%

    b. Beef: production down 4% and prices unchanged

        i. Implies a beef income decline of 4%

    c. Dairy production up 3% and prices down 5%

        i. Implies a dairy income decline of 2%

B. While income may be down in 1988, it will still be at a historically high level

1. Further recovery from farm financial crisis is likely in 1988

2. Bigger problems loom in 1989 and beyond

C. Agriculture has always faced considerable uncertainty, and it is not likely that it will be lessened in the immediate future

1. The list of important and difficult to predict events is no shorter now than in the past

2. A few that are high on our list

    a. Weather

    b. General economic growth

    c. Agricultural policy changes

ANSWER 10---DISAGREE

SLIDE 61: CREDITS